

REMARKS

Upon entry of the present amendment, claims 1-7, 9-13 and 15-19 will remain pending in the above-identified application and stand ready for further action on the merits.

The amendments made herein to claims 1 and 10, and the addition of new claims 16-19 to the application do not incorporate new matter into the application as originally filed, since support for the same occurs in the original filed specification (e.g., see page 13, line 22 to page 15, lines 5-9; page 16, lines 6-9, page 17, line 17 to page 18, line 3, and page 19, lines 1-3). Accordingly, entry of the instant amendment and proper consideration of pending claims 1-7, 9-13 and 15-19 is respectfully requested at present, since the instant amendment to the claims does not incorporate new matter into the application as originally filed.

Claim Rejections - 35 USC § 102

Claims 1-6, 9-12 and 15 have been rejected under the provisions of 35 USC § 102(b) as being anticipated by, or in the alternative under 35 USC § 103(a) rendered obvious by, Tadsen et al. (US 5,527,489). Claims 1-7, 9-13 and 15 have been rejected under the provisions of 35 USC § 102(a) as being anticipated by Nitta et al. (EP 936,269). Reconsideration of each of these rejections is respectfully requested based on the following

considerations and the amendments made herein to the pending claims 1 and 10 under examination at present.

The Present Invention and Its Advantages

As recited in pending claim 1, the present invention provides:

A process for preparing a high-bulk density detergent composition having a bulk density of 650 g/L or more, comprising the steps of:

(A) blending a liquid acid precursor of an anionic surfactant with a water-soluble, alkali inorganic substance in an amount equal to or exceeding an amount necessary for neutralizing the liquid acid precursor, in a substantial absence of an alkali metal aluminosilicate, thereby neutralizing the liquid acid precursor, **and carrying out step (B) after neutralizing the liquid acid precursor;** and

(B) adding an inorganic powder and a liquid binder to a neutralization mixture in step (A) after a point of initiation of formation of coarse grains of the neutralization mixture obtained during a course of a neutralization process in step (A) and mixing a resulting mixture, **wherein the inorganic powder is added to the neutralization mixture prior to the addition of the liquid binder to the neutralization mixture.** (emphasis added)

Accordingly, instant amended claim 1 is now characterized by (1) "carrying out step (B) after neutralizing the liquid acid precursor", and (2) in step (B) "the inorganic powder is added to the neutralization mixture prior to the addition of the liquid binder to the neutralization mixture."

In addition, claim 1 remains characterized by the addition of the inorganic powder and the liquid binder in step (B), after

a point of initiation of formation of coarse grains" of the neutralization process in step (A).

The above limitations mean that step (B) is carried out after neutralization of the liquid acid precursor and that the inorganic powder is added to the neutralization mixture prior to the addition of the liquid binder to the neutralization mixture.

This means that the inorganic powder and the liquid binder are each added before or during agglomerating in order to depress the growth of extreme particles. It does not mean adding the inorganic powder and/or the liquid binder after agglomeration.

Further, it is noted that by initiation of the addition of the inorganic powder at this point there can be exhibited the effect of accelerating the disintegration effect of the neutralization mixture (*see specification page 14*). Still further, by addition of the liquid binder at this stage, the adhesiveness of the liquid binder to granular surfaces can be advantageously reduced, whereby granulation can be suppressed (*see specification page 19*).

According to the process of the present invention, a high-bulk density detergent composition comprising a granular mixture having a high-bulk density of 650 g/L can be obtained, wherein the detergent composition has both excellent detergent properties and a small particle size (*see specification page 20*).

It is additionally noted that claim 10 has been amended herein as follows:

A process for preparing a high-bulk density detergent composition having a bulk density of 650 g/L or more, comprising the steps of:

- (a) blending a liquid acid precursor of an anionic surfactant with a water-soluble, alkali inorganic substance in an amount equal to or exceeding an amount necessary for neutralizing the liquid acid precursor, in a substantial absence of an alkali metal aluminosilicate, thereby neutralizing the liquid acid precursor, **and carrying out step (b) after neutralizing the liquid acid precursor;** and
- (b) adding an alkali metal aluminosilicate and a liquid binder to a neutralization mixture obtained in step (a) and mixing a resulting mixture, **wherein the alkali metal aluminosilicate is added to the neutralization mixture prior to the addition of the liquid binder to the neutralization mixture.** (*emphasis added*)

It is still additionally noted that newly added claim 18 (depending from claim 1) recites that "multiple additions of the inorganic powder occur, with at least one of the multiple additions being prior to the addition of the liquid binder to the neutralization mixture." Likewise newly added claim 19 (depending from claim 10) recites that "multiple additions of the alkali metal aluminosilicate occur, with at least one of the multiple additions being prior to the addition of the liquid binder to the neutralization mixture." Thus claims 18 and 19 each are characterized in allowing for "inorganic power" (claim 18) or

"alkali metal aluminosilicate" (claim 19) to be added in step at multiple times, with at least one of the multiple times being before addition of the liquid binder to the neutralization mixture.

For the Examiner's information, it is noted that the strict addition requirements set forth in independent pending claims 1 and 10 (and the dependent claims based thereon) for the "inorganic powder" (claim 1) and "alkali metal aluminosilicate" (claim 10) has unexpectedly allowed the applicants to advantageously control particle size in a manner that can not otherwise be achieved when such materials are not added after neutralization of the liquid acid precursor and before addition of the liquid binder. Such a discovery and the advantageous particle size results that are associated therewith are more than the result of mere optimization, and are in no way obvious to those of ordinary skill in the art based on a review of the cited art references being applied by the USPTO against the pending claims.

Legal Standard for Determining Anticipation

"A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference." Verdegaal Bros. v. Union Oil Co. of California, 814 F.2d 628, 631, 2 USPQ2d 1051,

1053 (Fed. Cir. 1987). "The identical invention must be shown in as complete detail as is contained in the ... claim." Richardson v. Suzuki Motor Co., 868 F.2d 1226, 1236, 9 USPQ2d 1913, 1920 (Fed. Cir. 1989). The elements must be arranged as required by the claim, but this is not an *ipsissimis verbis* test, i.e., identity of terminology is not required. In re Bond, 910 F.2d 831, 15 USPQ2d 1566 (Fed. Cir. 1990).

Legal Standard for Determining Obviousness

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations.

The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, not in applicant's disclosure. In re Vaeck, 947 F.2d 488, 20 USPQ2d 1438 (Fed. Cir. 1991).

"In determining the propriety of the Patent Office case for obviousness in the first instance, it is necessary to ascertain whether or not the reference teachings would appear to be

sufficient for one of ordinary skill in the relevant art having the reference before him to make the proposed substitution, combination, or other modification." In re Linter, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972).

Obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either explicitly or implicitly in the references themselves or in the knowledge generally available to one of ordinary skill in the art. "The test for an implicit showing is what the combined teachings, knowledge of one of ordinary skill in the art, and the nature of the problem to be solved as a whole would have suggested to those of ordinary skill in the art." In re Kotzab, 217 F.3d 1365, 1370, 55 USPQ2d 1313, 1317 (Fed. Cir. 2000). See also In re Lee, 277 F.3d 1338, 1342-44, 61 USPQ2d 1430, 1433-34 (Fed. Cir. 2002).

Distinctions Over the Cited Art

Tadsen et al. (US 5,527,489)

Each of pending claims 1 and 10 have been amended to recite limitations not taught or otherwise rendered obvious by the cited Tadsen et al. US '489 patent. Particularly, the cited Tadsen et al. US '489 patent fails to provide any teaching or motivation to those of ordinary skill in the art that would allow them to

arrive at the present invention, wherein the precise timing of the addition of the "inorganic powder" (e.g., see claims 1 and 18) or an "alkali metal aluminosilicate" (e.g., see claims 10 and 19) or that by such a precise timing one can advantageously control particle size in the inventive methods and thereby arrive at a high-bulk density detergent composition having a bulk density of 650 g/L or more.

Nitta et al. (EP 936,269)

It is submitted that the cited Nitta et al. EP '269 reference does not teach or otherwise provide for each of the limitations recited in instant amended independent claims 1 and 10 (or any of the pending claims that depend therefrom).

More particularly, as with the cited Tadsen et al. US '489 patent, Nitta et al. EP '269 also fails to provide any teaching regarding the precise timing of the addition of an "inorganic powder" (e.g., see claims 1 and 18) or an "alkali metal aluminosilicate" (e.g., see claims 10 and 19) or that by such a precise timing one can advantageously control particle size in the inventive methods and thereby arrive at a high-bulk density detergent composition having a bulk density of 650 g/L or more.

CONCLUSION

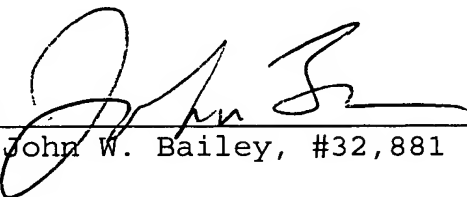
Based upon the amendments and remarks presented herein, the Examiner is respectfully requested to issue a Notice of Allowance clearly indicating that all pending claims 1-7, 9-13 and 15-19 are allowable under the provisions of Title 35 of the United States Code.

Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact John W. Bailey (Reg. No. 32,881) at the telephone number below, to conduct an interview in an effort to expedite prosecution in connection with the present application.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

BIRCH, STEWART, KOLASCH & BIRCH, LLP

By 
John W. Bailey, #32,881

JWB:enm
1422-0519P

P.O. Box 747
Falls Church, VA 22040-0747
(703) 205-8000